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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,168	06/04/2001	John Jones	11077-002002	7646

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EXAMINER

VALENTINE, DONALD R

ART UNIT PAPER NUMBER

1742

DATE MAILED: 08/07/2003

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Docketed By Billing Secretary	
Due Date:	_____
Deadline:	_____
Initials:	_____

Docketed By Practice Systems	
Action Code:	Resp OA
Base Date:	8/7/03
Due Date:	11/7/03
Deadline:	2/7/04
Initial:	CRS

Office Action Summary

Application No.

09/874,168

Applicant(s)

JONES ET AL.

Examiner

Donald R. Valentine

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-89 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 83-89 is/are allowed.
- 6) ☒ Claim(s) 47,51-53,59,63-69,73,76-78,81 and 82 is/are rejected.
- 7) ☒ Claim(s) 48-50,54-58,60-62,70-72,74,75,79 and 80 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/375,586.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 65-69, 73, 76-77 and 81 are rejected under 35 U.S.C. 102(b) as being anticipated by Zubak et al.

Zubak et al show an electrochemical machining apparatus having a starting mount (34), an ending mount (34'), an insulated conductive rod (27), an electrode having a profile corresponding to an end-profile on the inside of a tube (20) and mounted on a first end of the insulated conductive rod. A power source (32) is shown, the electrode is drawn through the tube and the rod is long enough that the electrode can be within the confines of either mount without the draw contacting the other of the mounts. (See figures 1-2 and col. 2, lines 35-67, col. 3, lines 20-24.)

Regarding claims 66-67, the reference teaches non-circular cross-sections and the electrode has a front end and rear end of a constant cross-section. (See col. 3, lines 50-63).

Claims 73, 76-77 and 81 are shown in Figures 1-2.

5. Claims 47, 51-53, 59, 63-65 and 78 and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zubak et al.

The reference shows a apparatus and method of forming an end-profile in the bore of a tube by drawing, from a first end of a tube to a second end of a tube, an electrode having an external profile corresponding to a desired end profile of a tube; and applying a potential across the space between a tube and an electrode (Figures 1-2 and col. 2, lines 25-67; col. 3, lines 19-62; and col. 4, lines 17-42).

Sodium chloride is disclosed (col. 3, line 32). The space while drawing appears to be 0.2mm-0.7mm because the reference recites "at least 0.01 mm". (See col. 3, lines 15-24).

The reference is silent regarding creep resistant alloys.

Applicant's disclosure appears to consider various other alloys to fall within the general class of alloy materials, which include creep resistant alloys.

It would be considered within the skill of the art to apply the method taught by the reference to tubes of any tube comprising an alloy material because the skilled artisan would determine the applicability of the method to materials which may demonstrate compatibility with an appropriate electrolyte, potential differential applied and other such process parameters as would be appropriate for consideration.

Allowable Subject Matter

6. Claims 83-89 are allowed.
7. Claims 48-50, 54-58, 60-62, 70-72, 74-75, 79-80 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: The references of record do not show or suggest the method comprising providing a molten creep resistant alloy, casting the alloy to form a tubular blank with a central bore and electrochemically machining a non-circular profile inside the bore.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Vishnitsky and Lavalierie et al show treating interior bore surfaces.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald R. Valentine whose telephone number is 703-308-3327. The examiner can normally be reached on Monday-Friday 9:30-6:00.

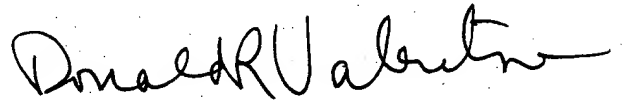
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 703-308-1146. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, reading "Donald R. Valentine". The signature is written in a cursive style with a large, stylized "V" and "A".

Donald R. Valentine
Primary Examiner
Art Unit 1742

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August 1, 2003